

**62.** The method of claim 39, further comprising:

rendering a bonus game presentation in the 3-D gaming environment and capturing the bonus game presentation on the one or more two-dimensional images.

**63.** The method of claim 39, further comprising:

receiving an input signal from a first input device coupled to the gaming machine to initiate one or more games of chance.

**64.** The method of claim 39, wherein the sequence of symbols to display from the virtual reel strip is determined such that the sequence progresses through the virtual reel strip towards an end of the virtual reel strip.

**65.** The method of claim 39, wherein, when the end of the virtual reel strip is reached in the sequence and more symbols are required for the sequence, a next symbol in the sequence is selected from symbols near a beginning of the virtual reel strip and the sequence again progresses through the virtual reel strip towards the end of the virtual reel strip.

**66.** The method of claim 39, further comprising:

displaying the final state for a plurality of virtual reel strips in a first game of chance;

storing the final state of each of the virtual reel strips;

for a second game of chance following the first game of chance,

determining the sequence of the symbols to display from the virtual reels strips wherein the final states from the plurality of virtual reel strips from the first game of chance are initial states of the sequence of symbols for the second game of chance.

**67.** A virtual reel model for a 3-D gaming environment on a gaming machine wherein the gaming machine is capable of receiving indicia of credit for a wager for a game of chance from an input device coupled to the gaming machine and outputting indicia of credit from an output device coupled to the gaming machine,

said virtual reel model comprising:

a geometry definition of a reel model for the 3-D gaming environment;

a first input parameter for specifying a total number of segments on the reel model wherein a symbol is drawn on each segment of the reel model in the 3-D gaming environment;

a second input parameter for specifying an index of a home segment on the reel model wherein the index of the home segment is used to specify a starting location for a first payline that the gaming machine is capable of drawing in the 3-D gaming environment; and

a third input parameter for specifying a number of visible segments wherein the visible segments are the number of segments above the home segment that are visible on a display screen on the gaming machine when 2-D images are rendered from the 3-D gaming environment comprising the reel model.

**68.** The virtual reel model of claim 67, wherein the rendered 2-D images are used as part of a game outcome presentation for the game of chance viewed on the gaming machine.

**69.** The virtual reel model of claim 67, wherein the rendered 2-D images are used as part of a bonus game outcome presentation for the game of chance viewed on the gaming machine.

**70.** The virtual reel model of claim 67, wherein the geometry definition of the reel model is for one of a flat strip or a curved rectangular strip.

**71.** The virtual reel model of claim 67, further comprising:

a fourth input parameter for specifying a number of touchable segments wherein the number of touchable segments specify active areas of a touch screen sensor coupled to the display screen that correspond to segment areas on 2-D images that are displayed to the display screen of the virtual reel model rendered from the virtual reel model generated in the 3-D gaming environment.

**72.** The virtual reel model of 67, further comprising:

a fifth input parameter for specifying a number of different types of symbols that are drawn on each symbol.

**73.** The virtual reel model of 67, further comprising:

a plurality of motion parameters for specifying a movement of the reel model over time in the 3-D gaming environment.

**74.** The virtual reel model 67, wherein the plurality of motion parameters are used to define one or more of a) a cock-up movement of the reel model in the 3-D gaming environment, b) a cock-down movement of the reel model in the 3-D gaming environment, c) a bounce-up movement of the reel model in the 3-D gaming environment, d) a bounce-down movement of the reel model in the 3-D gaming environment, e) a stop position of the reel model in the 3-D gaming environment, and f) a velocity as a function of time of the reel model in the 3-D gaming environment and g) a path of the reel model in the 3-D gaming environment as a function of time.

**75.** A gaming machine comprising:

a housing;

a master gaming controller designed or configured to control a game of chance played on the gaming machine mounted within the housing and to execute game logic;

an input device coupled to the housing capable of receiving indicia of credit for wagers on the game of chance;

an output device coupled to the housing capable of outputting indicia of credit from the gaming machine;

a memory device coupled to the housing for storing information used to generate a 3-D gaming environment comprising one or more virtual slot reels;

game logic executed on the gaming machine for rendering one or more two-dimensional images derived from the 3-D gaming environment; and

one or more display devices for displaying a game outcome presentation for the game of chance comprising said rendered one or more two-dimensional images.

**76.** The gaming machine of claim 75, further comprising:

game logic for rendering one or more 2-D images derived from the 3-D gaming environment for a bonus game outcome presentation.